

SEQUENCE LISTING

<110> BARBOUR, ALAN G.
CARTER, CAROL

<120> A DIAGNOSTIC TEST FOR INFECTION WITH A SPIROCHETE BORNE
BY AMBLYOMMA AMERICANUM

<130> UTSK:352USC1

<140> UNKNOWN

<141> 2003-07-14

<150> 08/437,013

<151> 1995-05-08

<150> 09/275,506

<151> 1999-03-24

<160> 28

<170> PatentIn Ver. 2.1

<210> 1

<211> 641

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 1

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tctgctcaaa atgtaaaaaac tgctgaagag cttggaatgc aacctgcaaa aattaataca 180
ccagcatcac taactggagc acaagcttca tggacattga gagttcaggt aggtgcaaat 240
caggatgaag caattgctgt taatatcttc tcaactaatg ttgcaaactc ttttgggtgga 300
gaaggtgttc aagcggctcc agctcaagag ggtgcacaac aggagggagt tcaaccagct 360
ccagctcaag gtgggattag ctctccaatt aatgttacaa ctgctattga tgctaattgca 420
tcgcttacaa agattgaaga tgctattaga atggtaactg atcaaagagc aaatcttggt 480
gctttccaaa atagacttga gtctgttaaa gctagcacag attatgctat tgaaaactta 540
aaagcgtctt atgctcaaat taaagatgca ataatgacag atgaaattgt agcatctaca 600
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<210> 2

<211> 213

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 2

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Leu	Thr	Asp	Glu	Ile	Asn	Arg	Val	Ala	Asp	Gln	Ala	Gln	Tyr	Asn	Gln
			20					25						30	

Met	His	Met	Leu	Ser	Asn	Lys	Ser	Ser	Ala	Gln	Asn	Val	Lys	Thr	Ala
			35				40					45			

Glu	Glu	Leu	Gly	Met	Gln	Pro	Ala	Lys	Ile	Asn	Thr	Pro	Ala	Ser	Leu
		50				55					60				

Thr	Gly	Ala	Gln	Ala	Ser	Trp	Thr	Leu	Arg	Val	Gln	Val	Gly	Ala	Asn
65					70					75					80

Gln	Asp	Glu	Ala	Ile	Ala	Val	Asn	Ile	Phe	Ser	Thr	Asn	Val	Ala	Asn
				85					90					95	

Leu	Phe	Gly	Gly	Glu	Gly	Val	Gln	Ala	Ala	Pro	Ala	Gln	Glu	Gly	Ala
			100					105					110		

Gln	Gln	Glu	Gly	Val	Gln	Pro	Ala	Pro	Ala	Gln	Gly	Gly	Ile	Ser	Ser
		115					120					125			

Pro	Ile	Asn	Val	Thr	Thr	Ala	Ile	Asp	Ala	Asn	Ala	Ser	Leu	Thr	Lys
		130				135					140				

Ile	Glu	Asp	Ala	Ile	Arg	Met	Val	Thr	Asp	Gln	Arg	Ala	Asn	Leu	Gly
145					150					155				160	

Ala	Phe	Gln	Asn	Arg	Leu	Glu	Ser	Val	Lys	Ala	Ser	Thr	Asp	Tyr	Ala
				165					170					175	

Ile	Glu	Asn	Leu	Lys	Ala	Ser	Tyr	Ala	Gln	Ile	Lys	Asp	Ala	Ile	Met
			180					185					190		

Thr	Asp	Glu	Ile	Val	Ala	Ser	Thr	Thr	Asn	Ser	Ile	Leu	Thr	Gln	Ser
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Ala Met Ala Met Ile

<210> 3

<211> 1336

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 3

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ctaataccga  ataaagtcaa  ttgagttggt  agttgatgaa  aggaagcctt  taaagcttcg  180
cttgtagatg  agtctgcgtc  ttattagcta  gttggtaggg  taagagccta  ccaaggctat  240
gataagtaac  cggcctgaga  gggtagtcgg  tcacactgga  actgagatac  ggtccagact  300
cctacgggag  gcagcagcta  agaatcttcc  gcaatgggcg  aaagcctgac  ggagcgacac  360
tgcgtgaacg  aagaaggctc  aaagattgta  aagttctttt  ataaatgagg  aataagcttt  420
gtaggaaatg  acaaggatg  gacgttaatt  tatgaataag  ccccggttaa  ttacgtgcca  480
gcagccgagg  taatacgtaa  ggggcgagcg  ttgttcggga  tcattgggcg  taaagggtga  540
gtaggcggat  atgtaagtct  atgtgtaaaa  taccacggct  caactgtgga  actatgctag  600
aaactgcatg  actagagtct  gataggggaa  gttagaattc  ctggtgtaag  ggtggaatct  660
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tgcacacttg  gtgttaatcg  aaaggttagt  accgaagcta  acgtgttaag  tgtgccgcct  840
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gagcatgtgg  tttaattcga  tgatacgca  ggaaccttac  cagggttga  catatacagg  960
atatagttag  agataactac  tctccgtttg  ggggtctgtat  acagggtgctg  catggttgtc  1020
gtcagctcgt  gctgtgaggt  gttgggttaa  gtcccgcaac  gagcgcaacc  cttgttgtct  1080
gttaccagca  tgtaaagatg  gggactcaga  cgagactgcc  ggtgataagc  cggaggaagg  1140
tgaggatgac  gtcaaatcat  catggccctt  atgtcctggg  ctacacacgt  gctacaatgg  1200
cctgtacaaa  gcgatgcaaa  acagtgatgt  gaagcaaaac  gcataaagca  ggtctcagtc  1260
cagattgaag  tctgaaactc  gacttcatga  agttggaatc  gctagtaatc  gtatatcaga  1320
atgatacggt  gaatac                                     1336

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<210> 4

<211> 330

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 4

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tgттаатatt ttctcaacta atgttgcaaa tcttttttgt ggagaagggtg ttcaagcggc 180
tccagctcaa gaggggtgcac aacaggaggg agttcaacca gctccagctc aagggtgggat 240
tagctctcca attaatgtta caactgctat tgatgctaata gcatcgctta caaagattga 300
agatgctatt agaatggtaa ctgatcaaag 330

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<210> 5
<211> 4
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      Peptide

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<400> 5
Gly Val Gln Ala
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```

<210> 6
<211> 9
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      Primer

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<400> 6
tctgctcaa 9

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```

<210> 7
<211> 12
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      Primer

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<400> 7
ggtgttcaag cg 12

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<210> 8
<211> 12
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 8
gttcaaccag ct

12

<210> 9
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 9
aacagctgaa gagcttggaa tg

22

<210> 10
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 10
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26

<210> 11
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 11
acatattcag atgcagacag aggt 24

<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 12
tgtagacgt taccgttact aacg 24

<210> 13
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 13
ctggcagtgc gtcttaagca 20

<210> 14
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 14
catatagtct tactatgcca cttag 25

<210> 15
<211> 31
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 15

Leu Arg Val Gln Val Gly Ala Asn Gln Asp Glu Ala Ile Ala Val Asn
1 5 10 15

Ile Phe Ser Thr Asn Val Ala Asn Leu Phe Gly Gly Glu Gly Val
20 25 30

<210> 16

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 16

Gln Ala Ala Pro Ala Gln Glu Gly Ala Gln Gln Glu Gly Val Gln Pro
1 5 10 15

<210> 17

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 17

Ala Pro Ala Gln Gly Gly Ile Ser Ser Pro Ile Asn Val Thr Thr Ala
1 5 10 15

Ile Asp Ala Asn
20

<210> 18

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 18

Ala Ala Pro Ala Pro Ala Ala

1

5

<210> 19

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 19

Ala Thr Pro Ala Pro Val Ala

1

5

<210> 20

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 20

Ala Ala Pro Ala Pro Ala Ser

1

5

<210> 21

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 21

Ala Gln Ala Ala

1

<210> 22

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 22

Pro Thr Pro Ala Thr

1

5

<210> 23

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 23

Pro Ala Pro Val Thr

1

5

<210> 24

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 24

Ala Gln Thr Ala

1

<210> 25

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 25

Pro Ala Pro Ala Thr

1 5

<210> 26

<211> 709

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 26

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gctcaataca accagatgca tatgttatct aacaaatcat ctgctcaaaa tgtaaaaact 180
gctgaagagc ttggaatgca acctgcaaaa attaatacac cagcatcact aactggagca 240
caagcttcat ggacattgag agttcaggta ggtgcaaatc aggatgaagc aattgctggt 300
aatattttct caactaatgt tgcaaactct tttggtggag aagggtgttca agcggctcca 360
gctcaagagg gtgcacaaca ggaaggagtt caaccagctc cagctcaagg tgggattagc 420
tctccaatta atgttacaac tgctattgat gctaattgat cgcttcaaaa gattgaagat 480
gctattagaa tggttaactga tcaaagagca aatcttggtg ctttccaaaa tagacttgag 540
tctgttaaag ctagcacaga ttatgctatt gaaaacttaa aagcgtctta tcgtcaaatt 600
aaagatgcaa taatgacaga tgaaattgta gcatctacaa ccaacagtat tttgacacaa 660
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<210> 27

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 27

Ile Ser Glu Phe

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<210> 28
<211> 641
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 28
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tctgctcaaa atgtaaaaac tgctgaagag cttggaatgc aacctgcaaa aattaatata 180
ccagcatcac taactggagc acaagcttca tggacattga gagttcaggt aggtgcaaat 240
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gaaggtgttc aagcggctcc agctcaagag ggtgcacaac aggaaggagt tcaaccagct 360
ccagctcaag gtgggattag ctctccaatt aatgttataa ctgctattga tgctaatagca 420
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